

A NEW SPECIES OF *LACHENALIA* FROM THE SOUTH WESTERN CAPE

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ABSTRACT

A new species of *Lachenalia*, *Lachenalia viridiflora* Barker is described.

UITTREKSEL

'N NUWE SOORT *LACHENALIA* VAN DIE SUID-WES-KAAP.

'n Nuwe soort *Lachenalia*, *Lachenalia viridiflora* Barker word beskryf.

INTRODUCTION

This species is extremely local and as far as is known only occurs in the Vredenburg district, where a number of collections have been made. The type material was collected in June 1964 and a further extensive collection was made in the type locality in June 1965. Seed was later distributed to several countries including New Zealand, where it has been successfully cultivated for several years under the manuscript name *Lachenalia viridiflora* Barker.

Lachenalia viridiflora Barker sp. nov. affinis *L. reflexae* Thunb., sed floribus viridianis insignibus, foliis non reflexis, distinguitur.

Planta 8—20 cm alta, plerumque nana. *Bulbus* depressoglobosus, 1,5—2,5 cm diam., tunicis spongiosis. *Folia* 2, lanceolata vel ovata, adscendens vel patentes, ad 13 cm longa, 3,5 cm lata, plerumque minoria; laete chlorina, immaculata, sed lineae depressae angustae superne aut interdum pustulis vel maculis fuscis supra. *Pedunculus* inflorescentia plerumque brevior; laete viridis; maculatus quandocunque folia maculis sunt. *Inflorescentia* 6—20 floribus, aliquot floribus sterilibus ad apicem versus. *Bractae* albae, ad 1 cm longae lineares-lanceolatae. *Pedicellus* curtus, 2—3 mm longus. *Flores* 1,8—2,3 cm longi, erecti vel patentes, ventricosi, obliqua basi; tubus 7 mm longus, viridianus; segmenta externa tubo longiora, viridicaerulea, carinis viridianis; segmenta interiora 5 mm longiora quam segmenta externa, apicem versus patentes, candida viridiflava versus centra, stria mediana viridiana. *Stamina* segmenta externa aequantia. *Ovarium* ovoideum, venetum, 4—5 mm longum. *Stylus* postremo exertus.

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FIG. 1.
Type locality for *Lachenalia viridiflora*.



FIG. 2.
Habitat of *Lachenalia viridiflora*.



FIG. 3.

Lachenalia viridiflora. Half life size. (Part of type material in cultivation, *W. F. Barker* 10171.)



FIG. 4.

Lachenalia viridiflora, 2 flowers, the upper showing the set of the inner segments at anthesis. Twice life size. (From type material in cultivation, *W. F. Barker* 10171.)

Plants 8—20 cm high, usually dwarf. *Bulb* depressed globose 1.5—2.5 cm diam. with spongy tunics. *Leaves* 2, lanceolate to ovate, suberect to spreading, up to 13 cm long and 3.5 cm broad, but usually less, bright yellow green without markings but with narrow depressed lines above, or in some plants with dark spots or pustules on the upper side. *Peduncle* usually shorter than the inflorescence, pale green, spotted in plants with spotted leaves. *Inflorescence* racemose 6—20 flowered, with a few sterile flowers at the apex. *Bracts* white, linear-lanceolate up to 1 cm long. *Pedicels* short 2—3 cm long. *Flowers* 1.8—2.3 cm long, erect to spreading, ventricose, oblique at the base; tube 7 mm long viridian green; outer segments a little longer than the tube, pale blue-green with a viridian green keel; inner segments 5 mm longer than the outer, spreading slightly at the tip at anthesis, shining white, shading to yellow green toward the centre with a viridian median stripe. *Stamens* as long as the outer segments. *Ovary* ovoid, blue green, 4—5 mm long; style finally exserted.

Diagnostic Characters: *Lachenalia viridiflora* is most closely allied to *Lachenalia reflexa* Thunb., having a ventricose perianth with a comparatively long tube, oblique at the base. It is distinguished from it by the bright viridian green colour of the flowers, which are more open at the mouth at anthesis and the leaves which are not distinctly reflexed. *Lachenalia viridiflora* only occurs on granite boulders in rock pans and crevices where a great deal of humus has collected, while *Lachenalia reflexa* occurs on open flat sandy ground.

Type Material: Vredendal district, Witklip Farm, in rock pans and crevices on huge granite boulders, 16/6/1964, *W. F. Barker* 10171, holotype (NBG, isotypes PRE, BOL, K).

Specimens Examined:

CAPE PROVINCE—3217 (Vredenburg): Witklip Farm, Vredenburg, in rock pans on granite boulders (—DD), 16/6/1964, *W. F. Barker* 10171 (NBG, PRE, BOL, K); Witklip Farm in rock pans on granite boulders (—DD), 7/6/1965, *E. G. H. Oliver* STE 31, 118 (NBG, PRE, STE, BOL, K); Steenberg Cove in rock crevices (fruiting) (—DB) 23/8/1953, *H. Hall* 742 (NBG); Stompneus on rocks near sea (flowering) (—DB), 28/6/1955, *H. Hall* 754 (NBG); Hill above Steenberg Cove, on huge granite boulders in crevices and rock pans, (—DB), 3/6/1970, *W. F. Barker* 10684 (NBG, PRE).

DISCUSSION

In the type locality, which consists of a huge granite boulder somewhat isolated from other similar formations in the area, the plants were found growing massed together in large numbers in rock pans and crevices where large quantities of humus and animal manure had accumulated. All the plants seen and collected had plain green leaves and peduncles without any visible spotting. The flowers which were erect in the bud stage, tended to spread at anthesis and later to become erect again. Plants collected on granite boulders near the sea at Steenberg Cove and Paternoster on the other hand, tended to be more scattered and more dwarf with fewer flowers. In the majority of specimens seen the leaves were

distinctly marked with dark spots or pustules on the upper surface, and the flowers tended to be more vivid in colour, smaller, and remained more erect than those of the plants from the type locality, however a few plants were found without any spotting or marking whatever, linking what at first had appeared to be two distinct local forms.

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